## SUPERVISOR'S APPROVAL

# PUBLIC OPINION EXTRACTION AND VISUALIZATION FROM TWITTER SOCIAL MEDIA PLATFORM

By

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This report was prepared under the supervision of the project supervisor, Mr Muhammad Bakri Bin Che Haron.It was submitted to the Faculty of Computer and Mathematical Sciences and was accepted in partial fulfillment of the requirements for the degree of Bachelor of Computer Science (Hons)

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JULY 30, 2015

## STUDENT'S DECLARATION

I certify that this report and the project to which it refers is the product of my own work and that any idea or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.

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#### **ABSTRACT**

Sentiment analysis in social network has emerged as an alternative and effective method to study human behavioral through their social interaction in the social media. In the current scenario, the number of social media user is growing rapidly, results in the rise of micro blog's popularity among internet user. In this project, Twitter, a micro blogging website has been used to gather public opinion on selected trending topics. However, gathering opinion from Twitter that have large amount of tweets daily is not a simple task as the opinion could be hidden in the pile of post. So, it is hard for human readers to extract the relevant opinions, summarize and organize them in a usable format. This project purpose a combination of techniques to assist in extraction and visualization process. The extraction process of the tweets will be done by using the REST API provided by Twitter. The extracted tweets will undergo a cleaning process to remove unrelated words and naive Bayes classifiers will be used to identify either the tweet is positive or negative. The classified tweet and the frequency of the unique word will be taken for the visualization process. The visualization process is done by using d3 word cloud. The project will implement the ADDIE model for the framework as it is suitable for data visualization. As a significance of the study, this project will give a review about peoples' opinions regarding the hot topics or latest news that been discussed in social media which Twitter is focused as the platform. Further research might explore the monitoring of sentiments in Twitter in a much detailed way. Another form of sentiment in sentences such as sarcasm, factual, or mood expression can be recognized by the system. The system should also able to reduce noisy data as much as it can in order to have a more accurate sentiment analyzer.

Keyword: Sentiment analyzer, bayes classifier, word cloud.

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